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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,343	09/13/2004	Chuan-Pei Yu	JEMP0001USA	5342
27765	7590	11/14/2006	EXAMINER TON, MINH TOAN T	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			ART UNIT 2871	PAPER NUMBER

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/711,343	YU, CHUAN-PEI	
	Examiner	Art Unit	
	Toan Ton	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-12,14 and 16-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-12, 14, 16-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4, 12 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Oda et al (US 2003/0063234).

Oda discloses a liquid crystal display device comprising (see at least Figures 1, 6): a liquid crystal display panel ; a light source (e.g., 12) for providing light beams to irradiate the liquid crystal display panel; and an optical sheet (e.g., 15,) positioned between the liquid crystal display panel and the light source and having a first surface facing the light source, the first surface having a plurality of prisms for totally reflecting portions of ambient light beams that have passed through the liquid crystal display panel to irradiate the liquid crystal display panel; each of the prisms comprising a first plane and a second plane, the included angle between the first plane and the second plane being in the range 80-110° (see at least col. 4, [0049], last two lines, which is within Applicant's range of 80°-130°).

Oda discloses the liquid crystal display device comprising each of the prisms being a symmetric structure or an asymmetric structure (see at least Figures 1, 6).

Oda discloses the liquid crystal display device comprising each of the prisms comprises a first plane and a second plane for totally reflecting portions of the ambient light beams that have passed through the liquid crystal display panel (see at least Figures 1, 6 & col. 4, [0048]).

Oda discloses the liquid crystal display device comprising the optical sheet (e.g., 15)

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having a second surface facing the liquid crystal display panel (see at least Figures 1, 6).

Both the claimed invention and Oda disclose the same structural LCD device comprising the optical sheet with similar prismatic structure, and thus comprising inherent functions/results such as increased brightness.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-11, 14 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda as applied to claims 1-2, 4, 12 and 23 above.

Oda discloses the use of a diffusing sheet (e.g., 16) for achieving advantages such as increased luminance, increased viewing angle. Further, it would have been at least obvious to one of ordinary skill in the art at the time the invention was made to employ an optical sheet formed integrally as a diffusing sheet for achieving advantages such as advantages such as cost reduction (e.g., minimizing component(s), known as a common goal in the art) while achieving increased luminance and/or brightness.

Alternative structure(s) appear at least to be obvious variations (i.e., not patentably distinct and functionally equivalent) to each other to one of ordinary skill in the art. For example: the second or first surface comprising prisms, the prisms comprising symmetric or asymmetric structure, the optical sheet comprising a diffusing sheet or polarizer.

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Materials used for the diffuser/polarizer such as polycarbonate are common and known in the art for achieving advantages such as excellent transparency. Therefore, it would have been obvious to one of ordinary skill in the art to one of ordinary skill in the art at the time the invention was made to employ a diffuser/polarizer such as polycarbonate, common and known in the art, for achieving advantages such as excellent transparency.

3. Claims 5-8 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda as applied to claims above 1-2, 4, 9-12, 14 and 20-23 and further in view of Shibata (US 5724108).

Shibata discloses a liquid crystal display device comprising an optical (prismatic) sheet employing the Snell law of refraction, wherein the display device yields advantages such as widening viewing angle characteristic. Therefore, it would have been at least obvious to one of ordinary skill in the art at the time of the invention was made to employ an optical sheet employing the Snell law of refraction for achieving advantages such as widening viewing angle characteristic.

Further, it would have been at least obvious to one of ordinary skill in the art at the time of the invention was made to employ an optical sheet having desired particular characteristics such as particular ranges as achieving advantages such as sufficient reflectance, good brightness, wide viewing angles since it has been held that discovering an optimum value of a result effective variable or optimum ranges involves only routine skill in the art (In re Aller, In re Boesch).

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Response to Arguments

4. Applicant's arguments with respect to the amended claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (571) 272-2303.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 8, 2006


TOANTON
PRIMARY EXAMINER